4252

INSTRUCTION BOOK

YUBA
BALL-TREAD TRACTOR
MODEL
15-25

YUBA MANUFACTURING COMPANY
MARYSVILLE AND BENICIA, CALIFORNIA

CARE AND OPERATION

OF

YUBA BALL TREAD TRACTOR

Model 15/25

A tractor is rated to do a certain amount of work at a certain speed. Knowing the amount of work fifteen (15) horses will do under similar conditions, give the 15/25 tractor the same load. Don't overload or overspeed the machine. It will handle a bigger load and travel faster than its rated speed, but overloading and excessive speed will shorten the life of the finest tractor ever built and lead to expensive repairs.

LUBRICATION

Efficient lubrication is the most important thing that the tractor owner or operator must consider. The very life and efficiency of the tractor depends upon the proper and regular application of the best lubricants obtainable.

Use only the highest grade of cylinder oil in the motor and change it every week or every fifty hours running time. Do not attempt to save money by leaving oil in the crank case for a longer period. This is false economy and is the cause of more motor trouble, and more motor repairs than any other one thing known to the tractor industry.

Five kinds of lubricants are required to properly lubricate a Yuba tractor. They are:- Cylinder oil for the motor, light oil (such as 3 in 1) for the magneto, transmission lubricant for the transmission, cup grease for the rear axle, front wheel, pulley shaft, and water pump shaft bearings, and track oil for the tracks.

OILING THE MOTOR

If crank case is empty the maximum amount of oil required to fill it is about eight quarts. When filling be sure the oil guage is working. Do

not depend altogether on the oil guage, but make sure by pulling up the wire by hand. Fill at least once a day and do not allow the oil supply to run too low as there will be danger of burning up the motor.

On the other hand, do not fill beyond the high-level mark, as this will cause motor to use an excessive amount of oil and will result in the formation of carbon in the cylinders.

OILING MAGNETO

Magneto should be oiled once a week. Use light oil, such as "3 in 1"; two drops in each oil hole.

OILING FAN

Oil the roller bearing in the fan once a day.

CHANGING OIL IN MOTOR

After fifty hours running time the oil should be drained out and fresh oil put in. This should be done when the motor is hot, as the oil is then very thin, and will drain out clean. Remove the drain plug in the bottom of the oil pan and allow the oil to drain into a bucket. Remove two of the inspection plates on side of motor and wipe out what oil remains in the case.

Never use waste to wipe out a motor. Use a clean rag and do not allow any lint or threads to remain in the crank case. Clean the strainer. Put on the inspection plates and pour in about eight quarts of fresh oil; use a clean can for this purpose.

TRANSMISSION

The transmission case should be filled to the bottom of the shafts with a compound such as Transmission Lubricant "B" or a mixture of two-thirds Zerolene Triple B, and one-third Zerolene A.

The clutches should be greased every five hundred hours with transmission grease of the same grade as used in transmission. To do this remove the small brass plug on clutch case, just in front of brake bands, and with a grease gun force in a liberal amount. This grease lubricates the propeller gear and the little pinion gears inside the clutch. THESE GEARS DO NOT GET LUBRICATED BY THE GREASE IN THE TRANSMISSION. Therefore, it is very important that they be greased by means of a grease gun. DO NOT NEGLECT THIS.

The transmission should be cleaned out at least twice a year.

When ready to do this remove transmission cover cap and pour in a few gallons of kerosene. Replace the cover cap and run the tractor in high gear for a few minutes. This will cut the grease and thin it down so that it will drain out better. Remove plug in bottom of case, draw off all that will run out. To do a thorough job remove the upper half of the transmission case and examine all bearings, bolts, cotter pins, etc.

If the felt gasket on transmission case is in bad shape and liable to leak, use a new one. Clean off edge of transmission case and apply a thick coat of shellac. Fit new gasket carefully and replace transmission cover. Set the cap screws down tight. Shellac lower side of gasket only.

OILING TRACKS

For the tracks use Summer Black or crude oil. Keep the track balls well oiled and allow oil to run on track drive sprocket and tread links long enough for it to work into the tread pins. This is important. Oil the tracks only when tractor is moving. Save oil by shutting off when tractor is standing.

PARTS REQUIRING GREASE

The large roller bearings in the track drive sprockets are lubricated by means of the alemite couplings on the sprocket hubs. Force in a liberal supply of grease once daily.

FRONT WHEEL

The hub on the front wheel is hollow in the center and it will take quite a little grease to fill this space. Keep filling until grease is forced out around bearings, then fill once daily.

PULLEY SHAFT

Fill roller bearing with grease once daily.

WATER PUMP

Fill the two small grease cups on water pump and screw down twice daily.

GENERAL INSTRUCTIONS

Before starting up tractor give it a close inspection, beginning with the motor. See that the oil in the crank case is up to proper level. Don't depend on the float to determine this, make sure by pulling up wire by hand. Examine fan belt, but do not tighten too much when cold as it will take up after running a few minutes.

See that radiator is full of water. Fill large compartment of fuel tank with distillate or whatever fuel you are using, and the small compartment with gasoline. The tank holds 21 gallons of distillate and 4 gallons of gasoline.

Fill track oil tank with track oil, and look over tractor for loose bolts, etc.

STARTING MOTOR

When ready to start the tractor see

that gears are in neutral position. Have clutch handles in neutral position, i.e., straight up and down. Turn on the valve under gasoline tank and allow gasoline to flow into carburetor. Open drain cock on bottom of carburetor for an instant and let out any water that may have accumulated.

Insert switch key and pull air choker out about half way.

Open throttle part way, but not enough to cause motor to race. Never start motor with throttle wide open, or even half way open, unless it is equipped with a governor.

Open the priming cocks on top of cylinders and prime with gasoline. A couple of squirts from a priming can or one teaspoonful to each cylinder is enough.

Close priming cocks and crank the motor. If after starting, motor runs too fast, close throttle part way, but do not try to idle the motor down too slow until it warms up. It requires a richer mixture while cold; regulate this with the air choker. If motor misses and throws out black smoke give it more air.

Use the choker only when starting and warming up a cold engine. Do not use it in the field to regulate mixture.

When motor has warmed up so that it will idle nicely, slow it down and throw the gear shift handle into low gear position, i.e. extreme gear. If you have difficulty in doing this, stop the motor with the magneto switch, shift gears, open throttle a little more, and start the motor with the gears in mesh. When ready to start tractor turn off gasoline and open valve from main fuel tank.

OPERATING TRACTOR

The two tracks on the Yuba tractor are controlled by independent clutches; the right hand clutch controls the right hand track and the left hand clutch the left hand track. Shoving clutch levers forward drives the tractor ahead. Pulling

them back will reverse the motion and cause tractor to back up.

STARTING TRACTOR

Speed up the motor with the foot accelerator and gradually shove both clutches forward as far as they will go. With both clutches in, tractor will travel straight ahead.

To make a right hand turn, release the right hand clutch and turn the tiller wheel to the right. Reverse this operation for a left hand turn. To stop tractor pull out both clutches, at the same time, and leave them in neutral position.

To shift into high gear, first shift into low, slow the motor down very slow and throw gear shift lever forward into high gear position with a quick jerk. Do not attempt to shift from neutral to high when motor is running.

At 800 revolutions per minute engine speed the tractor will travel 2.25 miles per hour in low gear, and 3.25 miles per hour in high. Motor should not be run faster than 800 revolutions per minute.

ADJUSTMENTS ON MOTOR

CARBURETOR

The carburetor once adjusted requires very little attention. Clean out the gasoline strainer, in fuel line, at carburetor, frequently and draw off water before starting. When necessary to change the fuel adjustment turn the main adjusting screw to the left for more gas and to the right for less gas. Do not move the idling adjustment above carburetor at butterfly valve. This is for idling only and has nothing to do with the power of the motor. Always adjust carburetor when motor is warm and with air choker wide open.

FAN BELT

To tighten fan belt loosen lock nut on fan shaft, turn the large adjusting nut on top of fan bracket until belt is tight and tighten lock-nut again.

RADIATOR

Keep the radiator filled with clean water, drain out once a month, and fill with fresh water. Use only clean water for this purpose.

FUEL

The fuel fed to the motor should be absolutely clean. The motor will not burn dirt or water. Clean out the strainer in fuel line at carburetor and see that a full stream is flowing through the pipe.

MAGNETO

Don't attempt to adjust or repair a magneto unless you have had some experience in such work.

Outside of keeping it clean and oiling the bearings once a week, very little attention will be required. The breaker points should separate 1/64 of an inch. Don't oil any part of the magneto except the three bearings under the little covers marked "Oil". About once a month remove cover from distributor box and wipe out with cloth saturated with gasoline.

Keep the high tension wires leading from magneto to spark plugs in good condition and keep points of spark plugs adjusted to about 1/50 of an inch.

CARE OF MOTOR

OIL

The most important thing in the care of the motor is, of course, the lubrication. If the motor is supplied with plenty of good clean

oil, motor troubles will be few.

After oil has been in the crank case for one week, subjected to the high temperature of the motor, and pumped over and over through the bearings it loses its lubricating qualities.

There are a number of reasons why the oil should be changed frequently. A certain amount of fuel gets by the piston rings and condenses in the crank case, causing dilution of the oil. A certain amount of dust is being taken in through the carburetor. The oil splashes up on the hot piston and clings there until it forms carbon. Expansion and contraction of the pistons causes this carbon to loosen and fall into the crank case and mix with the oil. There are always present small particles of metal from the pistons, rings, cylinders, and bearings. Oil containing even a small amount of this foreign matter is more of a cutting agent than a lubricant, and if allowed to remain in the motor it will result in loose bearings, worn or scored cylinders, and possibly ruin the crank shaft.

The dilution of the oil, by the fuel getting past the rings, can be reduced to a minimum by using at all times a mixture which is not too rich. A greater part of the dust can be kept out of the motor by keeping the Air Cleaner in first class condition. Keep all joints in tubing tight and clean out the dust receptacle daily. Do not remove this when motor is running, or start the motor while it is off. After it has been emptied out it should be screwed on good and tight. THIS IS IMPORTANT.

BEARINGS

Inspect the bearings at least once a month. This does not mean that they will have to be taken up this often. With proper care bearings will run indefinitely without showing wear.

Connecting rod bearings can be inspected and tested by removing the inspection plates. Turn the motor over until the connecting rod is near the bottom, place a pinch bar under the connecting rod cap and pry up and down. By holding one hand on the bearing the slightest movement can be felt.

The main bearings can be tested in the same manner except that the bar must be placed under the shaft instead of the bearings. It will be necessary to remove the oil pan to make adjustments on either the connecting rod or main bearings.

If any are found to be loose remove the bearing cap and take out one or more of the thin shims from each side of the bearing. Replace the cap and tighten the nuts. If shaft turns hard you have taken out too many shims and some must be put back. Shaft must turn freely when the nuts on bearing cap bolts are screwed down tight. Never back up the nuts to free the shaft; put in shims if too tight, and always take out the same number and same thickness from each side. THIS IS IMPORTANT.

Make it a point to inspect bearings regularly and take them up, whenever the least bit of play can be felt. Do not wait until they are heard to knock and pound. It will not only wear the shaft out of round, but may even cause a connecting rod or crank shaft to crystallize and break, wrecking the whole motor.

Regular inspection and adjustment will save many expensive repairs.

NEW BEARINGS

If the motor receives the right kind of care the bearings will run indefinitely, and it will rarely be necessary to replace them.

In 99 cases out of 100 where bearings are burned out, the cause can be traced to neglect or carelessness on the part of the owner or operator, and more time is lost in fitting new bearings than would be required to properly care

for the motor.

TO PREVENT BURNED OUT BEARINGS:

Use good clean oil and replenish every day.
Change oil in crank case once a week.
Flush out with kerosene once a month.
Thoroughly clean oil pump strainer once a week.
Keep radiator full of water.
Keep fan belt tight.
Don't run on rich mixtures.
Don't allow bearings to knock.
Don't allow anyone to work on the inside of the motor unless he knows what he is doing.
Don't allow anything to get inside of the motor that isn't clean enough to eat.

FITTING NEW BEARINGS.

This job should not be attempted by anyone but an experienced mechanic. However, in an emergency it may be done by the operator, and the following instructions are given to enable him to do a satisfactory job.

CONNECTING ROD BEARINGS

Remove the oil pan from the crank case; remove connecting rod cap and pull out the connecting rod and piston.

Remove the old bearings and clean off the crank shaft.

Fit the upper half of the bearing to the connecting rod and the lower half to the cap. See that the back of the bearing fits the rod and cap. Set the brass retaining screws down below the surface and have them tight. Draw a mill file across the rod and cap to bring bearings down flush with same. Without replacing piston in cylinder, fit the bearing to the crank shaft. If bearing is too wide file off ends, being careful to file both ends the same. The bearing should

have a little side play. Compare it with one of the bearings not burned out. Apply a thin coat of Prussian Blue to the crank shaft and try the bearing on. The blue spots will indicate where scraping will need to be done. Scrape away the sides of the bearings so that they don't come in contact with the shaft at this point.

The bearing should bear on the shaft, clear across the bottom and a little over half way up the sides. After both halves have been roughly fitted to the shaft, wipe clean. Reblue shaft and insert piston in cylinder, being careful not to shove it up too far. If you do the top ring will expand and lock the piston.

Put the lower end of connecting rod on shaft and put on cap, using just enough shims to make a snug fit. Turn the motor over several times and remove bearing cap and rod, being careful not to disturb the spottings. Scrape down the high spots carefully, reblue shaft and repeat the operation until a perfect bearing surface is obtained clear across the bottom and part way up the sides.

This done, thoroughly clean the bearing and shaft, also wash out the oil pipe leading to the wrist pin. First fit the bearing dry. Use the same number and thickness of shims on each side of the bearing. Adjust until the motor can just be turned with one hand when shims are in and bearing bolts tight. This fit obtained, loosen nuts, fit other bearings, if any then remove caps, oil bearings and shaft with cylinder oil, put on caps and tighten nuts good and tight. There must be no play in the bearings, nor should they bind. When all bearings have been fitted you should be able to crank motor by hand.

MAIN BEARINGS

To replace a main crank shaft bearing it will be necessary to take the motor out of the frame. Remove the pully shaft housing, and gear case cover, remove the oil pan and flywheel, and turn motor upside down.

Mark the timing gears, if they are not already marked. Remove connecting rods, main bearing caps, and lift out crank shaft. Fit new bearings to crank case so that they are flush with surface. Blue the shaft and proceed to fit by revolving shaft and scraping down the high spots. Fit all the bearings to the crank case before fitting bearing caps. Always fit bearings dry first, then oil before setting up for the last time. Loosen each bearing after fitting so it will not interfere with fitting others.

Use only clean tools to do this work, and allow no dirt to get into the bearings, Check up on the timing, put on connecting rods, gear case cover, oil pan, etc., and put motor in frame. Fill with fresh oil before starting and run slowly for a few hours without load. This is an important job and should never be undertaken by an amateur.

WRIST PINS

The wrist pins are held in the connecting rod by a clamp screw and turn in the piston. When the bushings become worn they should be pressed out and new ones pressed in.

PISTON RINGS

If motor has poor compression and valves are in good shape, it may be that the piston rings need to be renewed.

First, fit the ring in the cylinder in the position it would be if running. File the ends until there is clearance equal to about ten one thousandths of an inch (.010). This is to allow for expansion. The top ring absorbs more heat than the others. Therefore, it should have more clearance.

If rings do not have sufficient clearance they will break and score the cylinder. If they have too much they will leak compression. Fit carefully and oil generously before inserting piston.

VALVES

The valves should not be disturbed as long as motor has good compression. When it does become necessary to grind them the following instructions should be followed:

Remove the cylinder head and the valve spring cover plates. Compress the valve springs with a valve lifter and remove the little tapers around the bottom of valve stem.

Clean all carbon from around valve seat and stem. Apply a thin coat of valve grinding compound to the valve and rotate it with a screw driver. Do not revolve valve continuously in one direction, but turn slightly back and forth gradually working valve all the way around. During this operation lift valve frequently. This can be accomplished by placing a light coil spring under the valve. When pressure is relieved on screw driver the spring will lift valve.

After valves are ground-in to a perfect seat, carefully remove all the grinding compound from the valve and valve chamber, oil the valve and valve stem and replace. Mark each valve and put it back in its own place. Adjust valve tappets after grinding valves.

TIMING

If it is necessary to disturb the timing of the motor, extreme care must be taken to mark the gears before taking them out of mesh. This will assist materially in retiming the motor. If this is not done time according to the markings on flywheel.

The firing order is 1 - 3 - 4 - 2.

TIMING MAGNETO

Do not remove the magneto from the motor, and do not disturb the timing. However, if the magneto has been removed, follow the instructions given below.

Turn motor over in direction it runs until No. 1 cylinder is on compression stroke. Keep on turning until flywheel pointer shows 4-1/4" before D-C-1-4.

Motor is now ready to fire on No. 1 cylinder.

The magneto must be set so that cylinder No. 1 will fire $4\frac{1}{4}$" before dead center (D-C) on flywheel when motor is running.

Remove covers from breaker box and distributor box. Turn magneto over in direction indicated by arrow on front oil hole cover until impulse starter trips. Back up about one-half turn then forward until breaker points just begin to separate. Fasten securely in this position. Note which terminal the distributor brush is resting on and see that high tension cable from this leads to spark plug in cylinder No. 1. The firing order is 1-3-4-2.

TRANSMISSION

If transmission case is kept full of good grease and no dirt allowed to enter, transmission troubles will be few.

Tighten clutches as soon as they begin to slip. If catch does not hold adjustment and slips again soon after tightening, examine the clutch fingers.

CLUTCHES

Keep clutches tight enough that they will not slip when all the power is on one track. To adjust clutch, remove transmission case cover cap and remove the little cap screw in the screw collar, and turn collar to the right until the cap screw will go into the next notch in check collar. If one hole does not prove enough try two holes. If this is too much remove cap screw and insert it in the hole on opposite side of screw collar. This will give you an adjustment of half a hole. Do not allow clutches to slip for any length of time as this will wear out friction discs very rapidly.

REVERSE ADJUSTMENT

It is not necessary to shift gears in order to back up a Yuba tractor. The reverse gears are inside of the clutch and are operated by the brake bands around the clutch case. It should require very little effort to reverse the tractor. However, after tractor has been run for some time the brake bands may need adjusting.

Remove the cotter pin and the nut on bolt holding brake bands together at top and tighten nut slightly. Do not tighten too much. Bands must be free when clutch handles are in forward or neutral position. Replace cotter pin, Do not use any spring washers on these bolts.

TRACKS

The large adjusting rod in the front section of the ball race keeps the track at the proper tension.

The telescope portion of front end of ball race provides sufficient adjustment to allow of removing one link or section of track. This should be done as soon as there is a space of 4 inches or more at the telescope portion of race.

REMOVING TREAD

First, fasten front end of track to ball race by running a chain through the ball race just back of the upright and around the track just in front of the hinge bolt. Adjust the chain so that one of the track pins line up with the hole in raceway just above the hinge bolt. Drive the pin out, separate the ends of the track and pick out several balls from each side. Remove one tread and one track pin, replace track balls leaving space equal to one link and draw track together by cranking motor in gear. Drive in track pin and tighten nut on adjusting rod.

Keep tracks adjusted; this is essential in order to get the maximum amount of wear out of them, and avoid track troubles.

The track balls in a new tractor are 2" in diameter. When balls and tracks become worn down oversize balls can be substituted. This will take up the wear on both tracks and ball races.

There are 126 balls in each track, If any are lost they should be replaced. Don't run tractor with balls missing.

TRACK SPROCKETS

The track drive sprockets and the cross shaft pinions should be kept in close mesh. When in need of adjusting, loosen the bolts holding axle brackets to frame. Loosen lock nuts on the set screws in axle brackets and turn up the set screws until gears mesh to the required depth. Tighten lock nuts and tighten bolts in axle brackets.

Placing a jack under the rear end of the tractor will relieve some of the weight and make the adjustment an easy matter.

CARE OF YUBA BALL RACES AND TRACKS

Beginning with new ball races and new 2" balls the tractor should run one or two seasons, depending on soil conditions and care received, before it becomes necessary to equip with oversize balls. This will take up wear on the ball races and treads.

After equipping with oversize balls the tractor should run about one more season. By this time the races and treads may be worn down so that they will have to be replaced with new or repaired by building up with electric weld.

When this welding is being done the races can be built up enough so that the original balls, now probably worn down about 1/16", which were discarded at the time the tracks were equipped with oversize, can be used. These old balls should run a season, part of a season, or at least until the newly welded surfaces on the races and tread angles have worn down smooth. These balls can

now be removed and replaced by the oversize balls which were in the tracks when they were torn down for welding.

The races and treads are now in good condition, the balls about standard size, and should run one or two seasons without repair. By this time the races and treads will be worn down enough to accommodate a set of new oversize balls, after which tracks should run another season. At the end of this period it may be necessary to equip with new races, weld up the old ones again, or in extreme cases equip with oversize balls of a larger diameter.

When ball races are torn down for rebuilding the sprockets and sprocket bearings should be examined. If the sprockets show considerable wear they should be reversed. The R.H. sprocket put in the L.H. race and the L.H. sprocket in the R.H. race.

THINGS TO REMEMBER

Make up your mind that the tractor is going to be a success. The success or failure of a tractor depends on the care it receives after it leaves the factory.

Nearly everyone who owns a pleasure car provides a garage for it. How many farmers do you know of who have provided a garage for their tractors?

You wouldn't think of allowing your neighbor's boy or hired man to drive your car. Why hire an incompetent man to operate your tractor?

The engine in your automobile runs about one-half its rated speed and develops on an average about 15% or 20% of its rated horse power for an hour or two a day, and after the car is started and gains momentum it rolls along easily.

The engine in your tractor runs up to its rated speed and develops from 85% to 100% of its rated horse-power for ten hours a day and a tractor never gains enough momentum to carry it along.

THINGS TO DO EVERY DAY

Put in cylinder oil.
Fill radiator.
Fill fuel tank.
Fill track oil tanks.
Grease liberally all bearings requiring grease.

THINGS TO DO EVERY WEEK

Change cylinder oil.
Clean screen in oil pan.
Oil magneto.
Remove transmission case cover cap and see if grease is up to bottom of clutch shafts.
Go over entire tractor and tighten bolts,etc.
Adjust tracks.
Make the weekly inspection a habit.

ONCE A MONTH

Examine bearings.
Examine valve tappets.
Test compression.
Drain radiator and refill with fresh water.
Wash out motor with kerosene.

DON'T

Don't expect your tractor to be a success unless you take care of it.

Don't try to save money by leaving cylinder oil in the motor longer than one week.

Don't overload or overspeed tractor.

Don't run motor if oil level is below low level mark.

Don't depend on the oil guage, it may be stuck.

Don't run with loose bearings.

Don't run with loose tracks.
Don't run with balls missing.
Don't run long if motor overheats. Locate and remedy the trouble.
Don't run with loose fan belt.
Don't allow anything in front of the radiator.
Don't try to shift gears without slowing down the motor.
Don't use waste to wipe out crank case, use clean rags.
Don't operate tractor without air cleaner.
Don't remove dust receptacle when motor is running.
Don't run motor with one or more cylinders missing.
Don't run with mixture too rich or too lean.
Don't race the motor.
Don't leave tractor alone with motor running.
At the end of the season don't run the tractor out behind the barn and leave it there. Overhaul it and give it a coat of paint.
Don't say you can't afford to take the time to care for the tractor. You can't afford to do otherwise.

ORDERING PARTS

Always give MODEL and NUMBER of your tractor when ordering parts. The model and number can be found on the brass plate on rear of transmission case.

Order all parts from BRANCH or DEALER in your territory.

To obtain parts promptly give the NAME, CATALOG NUMBER, and LETTER of parts wanted.

When telegraphing or cabling for parts use UTILITY CODE on page four (4) of parts book.

Do not order by sets or pairs, as this is misleading; for instance, one set of connecting rod bearings might mean bearings for one rod or all four rods. Give exact number of parts desired.

Give complete shipping instructions including local address, and state whether you wish goods

forwarded by express, freight, or parcel post.

Below is a good form of letter to use in ordering parts:

Willows, Calif.,
January 26, 1922.

Yuba Mfg. Co.,
Marysville, Cal.,

Gentlemen:

Please send by parcel post to Wm. Jones Willows, Cal., R.F.D. No. 2:

1 - Hyatt bearing, catalog No. 233
1 - Steering cable, catalog No. 141

for Model 20/35, serial No.____________

Yours truly,

Wm. Jones.

RETURNED GOODS AND CLAIMS

Prepay all charges on parts shipped to factory for repairs or replacement.

Give owner's name and address on the shipping tag. WRITE CLEARLY OR PRINT.

Parts shipped in for repairs should be accompanied by a letter of instructions explaining the work to be done.

When placing claims for replacement give all information that will enable us to make fair adjustment.

Claims for shortages or error in orders must be made upon receipt of goods. Claims made later than this will not receive consideration.